



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RB6891195-11
Job Sheet 178233



12-5

015

2940
3524

SHIP
7-20

NO
FAX

Part No: RB6891195-11

Job Qty: 6 ea

Part Name: Guide



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 5/29/18

Job Tracking No:

Due Date: 7/3/18

Created By: Logan David

Type: SOLD

Description:

Note: DWG RB6891195 REV 1 IPP REV A 18.05.28 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea	7/3/18	7/3/18	0.00	0.00	Start Up Machining-2		
110	CNC Lathe	6 pcs	7/3/18	7/3/18	0.00	1.50	MORI SL-154		
120	QC	6 pcs	7/3/18	7/3/18	0.00	0.00	QC2 Machining-4		
122	CNC Vertical Machining	6 pcs	7/3/18	7/3/18	0.00	1.20	MORI NV5000-1		
124	QC	6 pcs	7/3/18	7/3/18	0.00	0.00	QC2 Machining-4		
130	QC	6 pcs	7/3/18	7/3/18	0.00	0.00	QC8 Machining-4		
150	Outsource	6 pcs	7/3/18	7/3/18	0.00	0.00	Outsource12		
160	Packaging	6 pcs	7/3/18	7/3/18	0.00	0.00	Packaging2		
170	QC	6 pcs	7/3/18	7/3/18	0.00	0.00	QC6		
180	Packaging	6 pcs	7/3/18	7/3/18	0.00	0.00	Packaging3-1		
190	QC21-SA	6 Ea	7/3/18	7/3/18	0.00	0.00	QC21		

Part Op 110 - 1-Machine as per DWG. FC 168 FOLIO REV: AA DWG REV: 1 2-Deburr
Descriptions: 122 - 1-Machine as per folio FC 168 FOLIO REV: AA DWG REV: 1 2-Deburr
150 - --Issue P/O to Groupe Altech; PO 168 -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M4048R0-750	M4048R0-750	1.9500 ft (.325 ea)	90-Start up Operation	5039966
MT-414065-R1.125 45 18-06-27				

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M4048R0-750	2 DAS	20	0
MT-414065-R1.125 45 18-06-27				

Part Specifications



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

ex 6/15/18 3:15 PM dart.logan.david

Container No: S093036



Part: RB6891195-11

Job No: 178233

Serial No/Batch: S093036

Revision: 1

Inspector:

Exp Date:

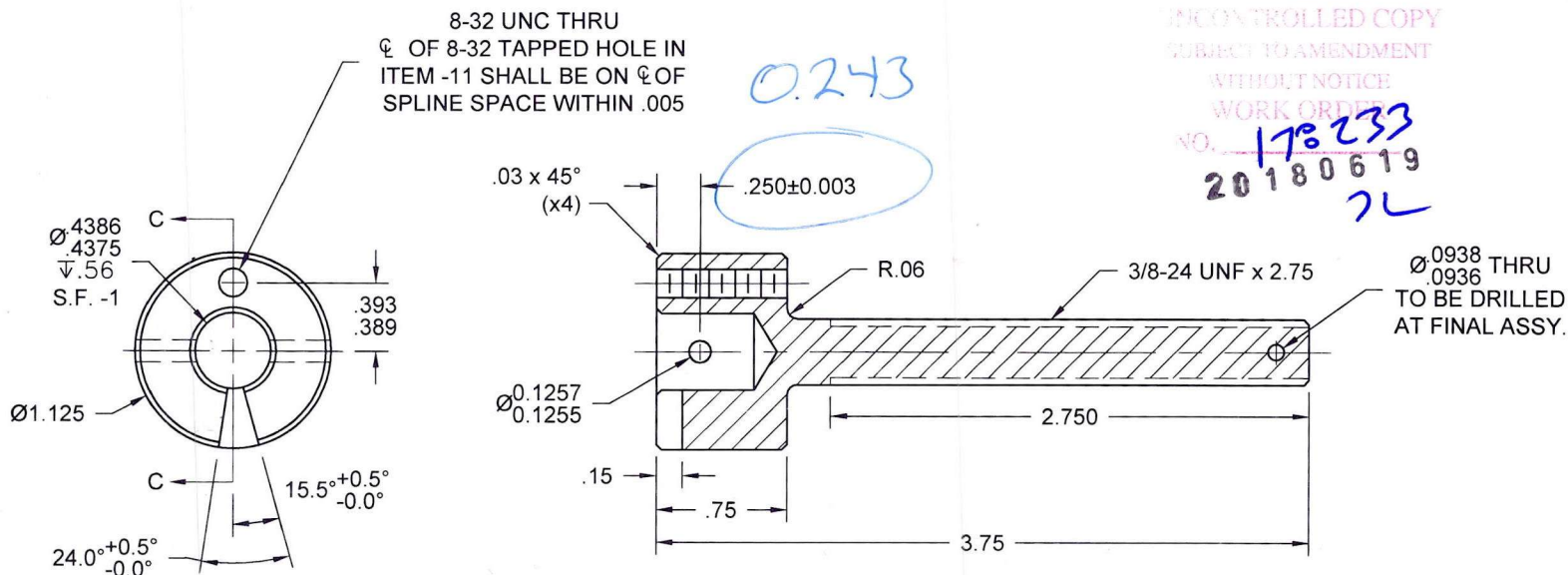
Instructions:

Date: 07/18/18

IRL=../Part/Job_Sheet.asp&Report=Tru... 1/1

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
B	REDRAWN FROM TATTERED ORIGINAL PER D.W.	9/16/11	RJC
1	CH'D -11 HOLE FROM Ø.0937-.0928 P.F. -8 AT ASSY. & ADDED MISSING DOWEL PIN HOLE & ADDED .250 ±.003 DIMENSION PER G.E.	5/29/12	RJC



SECTION C-C

(-11)
GUIDE

NOTES

- THIS ITEM TO BE ASSEMBLED INTO -1,
REFER TO -13 ASSEMBLY FOR DETAILS.

RED BARN MACHINE	
TITLE PULLER - COMPRESSOR ROTOR SPLINED ADAPTER	
DWG NO. RB6891195-11	REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	DRAWN BY: CLOUGH
DECIMALS .XXX ± .005	APPROVED <i>D. Med</i>
METRIC REF. XXmm ± .1mm	HEAT TREAT
FRACTIONS ± 1/32	FINISH BLACK OXIDE
ANGLES ± 5°	SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 7/8/11
SHEET 9 of 11	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 178233
20180619
2L

1.1235-5618
.1055-

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. <u>RBEM633V3000131 Rev. B</u>	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier Quality ☐		
Date : _____	Sequence #: _____	QTY Affected : _____	MRB (QSI042) JULY 17, 2018	
Description Work Order Deviation		Disposition		Completed By
RB6891195-11 dimension 0.250" +/-0.003" is 0.243"		The -1/-11 are transfer drilled together once assembled therefore this deviation will have no effect on the fit, form or function of the tool.		
				Lead hand / Supervisor
				QC / QA Coordinator
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread		
Other/Details: _____				

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval																			
Description Work Order Deviation				Disposition																					
				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																					

Root Cause <table style="width:100%;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>				Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	<table style="width:100%;"> <tr><td>☐ Pressure/Forced</td></tr> <tr><td>☐ Bending</td></tr> <tr><td>☐ Centre Not Concentric</td></tr> <tr><td>☐ Cracks</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td></tr> <tr><td>☐ Cuffs</td></tr> <tr><td>☐ Crushing</td></tr> <tr><td>☐ Heat Treat</td></tr> <tr><td>☐ Wave/Twist in Tube</td></tr> <tr><td>☐ Marks/Chatter</td></tr> </table>				☐ Pressure/Forced	☐ Bending	☐ Centre Not Concentric	☐ Cracks	☐ Crimp/Kink/Ripple/Wave	☐ Cuffs	☐ Crushing	☐ Heat Treat	☐ Wave/Twist in Tube	☐ Marks/Chatter	FAULT CATEGORY <table style="width:100%;"> <tr><td>☐ Temperature/Cure</td></tr> <tr><td>☐ Set-up</td></tr> <tr><td>☐ BOM/Route</td></tr> <tr><td>☐ Broken/Damage/Defect</td></tr> <tr><td>☐ Inspection Incomplete/Unqualified</td></tr> <tr><td>☐ Contamination</td></tr> <tr><td>☐ Countersink</td></tr> <tr><td>☐ Cut Too Short</td></tr> <tr><td>☐ Instructions Incomplete/Unclear</td></tr> <tr><td>☐ Drill Holes</td></tr> </table>				☐ Temperature/Cure	☐ Set-up	☐ BOM/Route	☐ Broken/Damage/Defect	☐ Inspection Incomplete/Unqualified	☐ Contamination	☐ Countersink	☐ Cut Too Short	☐ Instructions Incomplete/Unclear	☐ Drill Holes	<table style="width:100%;"> <tr><td>☐ Power Loss/Surge</td></tr> <tr><td>☐ Folio/Program</td></tr> <tr><td>☐ Grain</td></tr> <tr><td>☐ Weld</td></tr> <tr><td>☐ Wrong Stock Pulled</td></tr> <tr><td>☐ Out of Sequence</td></tr> <tr><td>☐ Off-set</td></tr> <tr><td>☐ Misabeled</td></tr> <tr><td>☐ Fit/Function</td></tr> <tr><td>☐ Misaligned/off center</td></tr> </table>				☐ Power Loss/Surge	☐ Folio/Program	☐ Grain	☐ Weld	☐ Wrong Stock Pulled	☐ Out of Sequence	☐ Off-set	☐ Misabeled	☐ Fit/Function	☐ Misaligned/off center	<table style="width:100%;"> <tr><td>☐ Positioned Wrong</td></tr> <tr><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Part Incorrect</td></tr> <tr><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Part Moved</td></tr> <tr><td>☐ Drawing</td></tr> <tr><td>☐ Finish</td></tr> <tr><td>☐ Misread</td></tr> <tr><td>☐ Turning Sequence</td></tr> </table>				☐ Positioned Wrong	☐ Outside Dimensions	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Drawing	☐ Finish	☐ Misread	☐ Turning Sequence
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